

REMARKS

The examiner in "Response to Arguments" states that Applicant did not provide citation for where "integrated with the set of goggles" has been supported in the original disclosure.¹ Applicant contends support for this subject matter can be found in the original filed application, for example, at page 4, lines 15-21 which reads:

Referring to FIG. 3, each set of goggles 20a and 20b includes one left display (left display 56a and left display 56b) and one right display (right display 60a and right display 60b). Each set of goggles 20a and 20b includes a receiver (e.g., receiver 70a and receiver 70b) containing a battery source (not shown). Receivers 70a-70b receive the audio and video signals transmitted from processors 16a-16b.

In addition, Figure 3 of the subject application also clearly shows this feature (reproduced below).

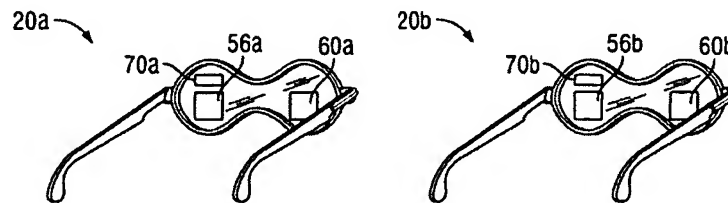


FIG. 3

35 U.S.C § 103

The examiner rejected claims 1-10, 13-21, and 24-26 under 35 U.S.C. 103(a), as being unpatentable over Abbasi, US 6,786,863, in view of Yee, US 6,016,385, and in further view of Biocca et al., US 2002/0080094.

Claim 1 as amended recites, among other things "an adapter to send the morphed, first video image signal to a communications network and sounds in connection with a theme of the morphed, first video image signal and to receive a second, video image signal ...". Support for

¹ Office Action, page 2.

this subject matter can be found, for example, in the originally filed application at page 8, lines 8-12:

Communication gateway 16a using conventional techniques can supplement the audio signals received with stored virtual sounds. For example, waves are added to a beach scene, or eagles screaming are added to a mountaintop scene.

In rejecting claim 1, the examiner states on page 6 of the Office Action that:

Neither Abbasi nor Yee describe that the image acquired by the camera but do not describe wherein the image is morphed or overlays the image on a virtual scene. However, Biocca teaches a teleportal system to provide remote communication to a plurality of users, wherein a processor that receives a first video image signal, morphs the first video image signal and sends the morphed image signal to a second, physical location to be displayed ([0037]), wherein the display is integrated with the set of goggles (integrated with the headset of the user, [0045], [0050]); and wherein the processor overlays a virtual environment over one or more portions of the video image to form a virtual scene (figures 13 and 14, [0045], [0050]). It would have been obvious to one of the ordinary skill in the robotic and communication arts, to morph the acquired image because as Biocca suggests, morphing the image and overlaying the image allows the image to be perceived in a user preferred 3D or stereoscopic view that gives a more realistic view of the second location ([0038]-[0039]).

As such, the examiner in the above excerpt readily acknowledges neither Abbasi nor Yee describes image is morphed or overlaying image on a virtual scene. Therefore, neither Abbasi nor Yee would render obvious ... sounds in connection with a theme of a morphed, first video image signal, as required by amended independent claim 1.

Biocca does not remedy the foregoing deficiencies of Abbasi or Yee at least because Biocca does not disclose or suggest ... sounds in connection with a theme of a morphed, first video image signal. In contrast, Biocca merely describes a teleportal system that allows a user to experience a 3D virtual environment via a projective augmented-reality headset.² However, the reference is silent in regards to ... sounds in connection with a theme of a morphed, first video image signal.

Therefore, claim 1 is allowable over purported combination of Abbasi, Yee and Biocca.

Claim 15, as amended, recites similar features of claim 1 and is allowable for analogous reasons discussed in claim 1.

² See Biocca at paragraphs [0010]-[0012].

Claim 3-10, 13-14, 17-21, and 24-26 are allowable at least for the reasons discussed in claim 1.

Claims 2 and 16

Claim 2 further limits claim 1 and requires that the processor overlays a virtual environment over one or more portions of the video image to form a virtual scene.

The examiner in the above excerpt relies on Biocca at figures 13 and 14, paragraphs [0045] and [0050] (reproduced below) for its alleged disclosure of the features set forth in claim 2. Applicant contends none of the discussions pointed out by the examiner is relevant to the claimed features. For example, the discussion in paragraph [0045] merely describes a teleportal headset using digital video cameras to capture images of a user's face; while paragraph [0050] discloses a preferred embodiment of the projective augmented-reality headset with a pair of LCD displays.

[0045] FIGS. 9, 10 and 11 illustrate teleportal headset 105 of the present invention. Teleportal headset 105 preferably includes a facial expression capture system 402, ear phones 404, and a microphone 403. Facial expression capture system 402 preferably includes digital video cameras 601a and 601b. In the preferred embodiment, digital video cameras 601a and 601b are disposed on either side of the user's face 606 to provide a stereo video image of user's face 606.

[0050] FIGS. 13 and 14 show a first preferred embodiment of a projective augmented-reality display 900 which includes a pair of LCD displays 902 coupled to headwear 905. In the preferred embodiment, a pair of LCD displays 902 project images to the eyes of the users. A microphone 910 is also coupled to headwear 905 to sense the user's voice. Furthermore, an earphone 912 is coupled to headwear 905. A lens 906 covers the eyes of the user 914 but still permits the user to view the surrounding around her. The glass lens 906 transmits and reflects light. In this manner, the user's eyes are not occluded by the lens. One preferred material for the transparent glass lens 906 is a "half silvered mirror."

Biocca may arguably disclosing morphing images to approximate a remote object.³ However, nothing in the reference discloses or suggests a processor overlays a virtual environment over one or more portions of the video image to form a virtual scene.

³ See Biocca at paragraph [0038].

Therefore, dependent claim 2 is allowable over purported combination of Abbasi, Yee and Biocca.

Claim 16 recites similar features of claim 2 and is allowable for analogous reasons discussed in claim 2.

35 U.S.C. §103

The examiner rejected claims 11, 12, 22, and 23 under 35 U.S.C. 103(a), as being unpatentable over Abbasi in view of Yee and Biocca as applied to claims 7 and 20 above, and further in view of Simmons, US 2003/0030397.

The examiner argues that:

Neither Abbasi, Yee nor Biocca teach that the body of the robot includes that the cameras are positioned in the eye sockets and the microphone of the robot is positioned in the ear canal. However, Simmons teaches a system and method of controlling a robot remotely, wherein the robot is a humanoid robot (figure 5); the robot includes an eye socket and the camera is positioned in the eye socket ([0026]); and the robot includes an ear canal wherein the microphone is positioned in the ear canal ([0016]). It would have been obvious to one of ordinary skill in the art to combine the invention of Abbasi in view of Yee and Biocca with the teachings of Simmons because as Simmons suggest, placing the sensors in the position corresponding to the human sensors aligns the sensors to the perspective of the use and better reflects the environment to the perspective of the user ([0026]) thereby giving a more realistic perception.⁴

Claims 11, 12, 22 and 23 depend indirectly from their respective base claims 1 and 15. Simmons neither describes nor suggests a communication network provides sounds in connection with a morphed, first video image signal, as required by amended claims 1 and 15. Therefore, claims 11, 12, 22 and 23 are allowable at least for the reasons discussed in claims 1 and 15.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable, as well as reasons of record.

Any circumstance in which the Applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good

⁴ Office Action, page 7.

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reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

In view of the foregoing amendments and remarks, Applicant respectfully requests entry of the amendment since it addresses specific objections first raised by the examiner in the instant office action, does not require any further consideration or search. Accordingly, Applicant submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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